

# CREDIT OPINION

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# North Carolina Turnpike Authority (Monroe Expressway)

Update following rating affirmation; outlook positive

# **Summary**

The Monroe Expressway's (Baa3 positive senior lien toll revenue bonds) credit profile benefits from strong support by the State of North Carolina (Aaa stable) and its agency the North Carolina Department of Transportation (NCDOT), which has financed a meaningful portion of capital spending and provided a contingent guarantee to cover shortfalls in funding the operating and maintenance (O&M) and renewal and replacement (R&R) reserve requirements. The ramp up of traffic activity, which is performing ahead of plan even with the impact of COVID, is supported by substantial liquidity at the project, including a ramp-up reserve that at \$53 million is more than 5x average annual debt service (\$10 million) over the next five years.

Traffic has performed well since the opening of the road (November 2018) in spite of the impact of COVID. Notwithstanding the more than 80% of overall activity from passenger vehicles, traffic on the road has rapidly recovered above pre-pandemic levels, with 2021 calendar year transactions roughly 24% above 2019 levels. We view this as a positive sign that the road is able to capture traffic from the adjacent toll-free US 74. We expect the rate of growth will moderate as the road transitions from ramp up to stabilization over the next year, but the trajectory remains adequate to the road to more comfortably manage projected debt service and O&M expenses going forward.

The credit profile remains constrained by high leverage and more limited standalone flexibility when incorporating the payment of operating and maintenance requirements - i.e., approximately 1.1x coverage of O&M/R&R requirements through 2030. The credit quality also reflects the still limited operating track record of the road and acknowledges the fast growing but less densely populated nature of the service area along the alignment.

# **Credit strengths**

- » Traffic volumes exceed initial projections
- » Strong support from the State of North Carolina and NCDOT
- » Robust economic characteristics of the service area
- » Ramp-up reserve

# **Credit challenges**

» Limited operating track record and modest size of service area

- » Modest congestion on existing US 74 compared with other rated toll roads in large metropolitan areas
- » High leverage

# Rating outlook

The positive outlook reflects the road's strong traffic performance both prior to and through the pandemic as well as its robust internal liquidity to bolster financial flexibility and manage any near-term challenges that may materialize. The outlook incorporates our view that traffic on the road will remain supported by further ramp up, normalizing economic activity and above-average demographic drivers over the next 12 to 18 months.

# Factors that could lead to an upgrade

- » Continuing traffic and revenue growth which result in total net revenue debt service coverage ratio above 1.0x
- » Maintenance of strong liquidity position, such as days cash on hand above 1,000 days on a sustained basis

# Factors that could lead to a downgrade

- » Lower than projected revenue as a result of lower transaction volumes or lower toll rates
- » Weaker financial or policy support by the state or the NCDOT

#### **Profile**

The Monroe Expressway is a single asset, 19.8 mile controlled-access toll road located southeast of Charlotte, running from US 74 in Union County, North Carolina. The facility runs roughly parallel to US 74, creating a high-speed alternative to the non-tolled commercial corridor along US 74. US 74 is the major east-west route connecting the Charlotte region, to the North Carolina coast and the port at Wilmington. The road is also the primary connection between Union County and Mecklenburg County (the City of Charlotte). The Monroe Expressway's main purpose is to relieve congestion on US 74.

The toll road includes four travel lanes, a depressed grass median and eight interchanges.

NCTA entered into a Roadside Toll Collection System (RTCS) contract with TransCore in March 2017. This contract includes capital costs for RTCS implementation, as well as maintenance of the system during the initial five-year period. In addition, NCTA selected Kapsch to supply Automatic Vehicle Identification (AVI) Readers and Transponders. For operating services, NCTA has selected GC Services which is also providing operating services for the authority's separately financed Triangle Expressway (No. Carolina Tpke Authority (Triangle Expressway), Baa2 stable).

# **Detailed credit considerations**

# **Revenue Generating Base**

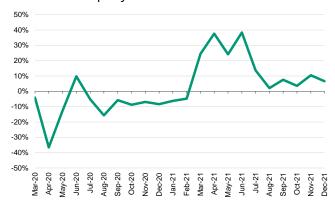
The Monroe Expressway is the primary connection between Union County and Mecklenburg County and the City of Charlotte. It provides travel time savings to fast growing portions of the greater Charlotte area, which has robust economic and demographic characteristics that will continue to drive toll transaction and revenue growth as the recovery from the coronavirus pandemic takes hold.

Passenger vehicles represent more almost 90% of traffic on the toll road, and 80% of total toll revenues. The areas surrounding the expressway are predominantly residential communities that provide a growing base of commuters with access to Charlotte and other commercial centers along the US 74 corridor.

Traffic on the road is recovering well and currently exceeds pre-COVID levels. We expect this trend to hold as mobility and economic conditions increasingly normalize, and as the road continues to ramp up to a stabilized state.

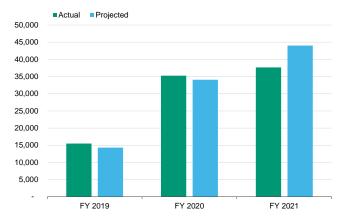
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Exhibit 1
Activity has recovered in excess of pre-COVID levels...
Transactions as % of prior year levels



March 2021 onward as % of 2019
Source: North Carolina Turnpike Authority

Exhibit 2 ... and traffic progression only modestly trails initial forecast Fiscal year (June 30) transactions, in thousands



Source: North Carolina Turnpike Authority, CDM Smith

The underlying service area remains strong, and we expect the Charlotte economy will fully recoup pandemic-related losses well ahead of the national pace. The stalwart finance industry and the surge in homebuilding will boost gains. Longer term, strong demographics and low business costs will attract high-quality investment and keep Charlotte an above-average performer.

#### **Financial Operations and Position**

In fiscal 2021 the project had roughly \$22 million of gross revenue available for debt service, level slightly below than reported in 2020. Total debt service coverage ratio on a gross basis declined to nearly 3.0x coverage and 1.3x coverage on a net basis, from 5.4x and 3.0x in 2020, respectively. Compressed coverage metrics are expected as debt service payments will gradually increase over the life of the debt.

The bond ordinance calculations are on a gross revenue pledge, while Moody's also calculates DSCR on a net revenue pledge. On a gross basis, we expect available revenues will increase from \$22 million (2021) to \$35 million (2026) in the next five years, which will provide ample coverage of the roughly \$10.1 million of average annual debt service in the same period. Over this time, coverage will also be supported by the more than \$53 million ramp-up reserve, which is not expected to be released until 2024.

## Trajectory is outperforming Moody's initial case

At rating assignment, management forecast an average Senior Lien DSCR of 4.8x, an average senior lien and TIFIA loan DSCR of 2.5x and an average all-in coverage ratio of around 1.2x for the period 2024-2054.

Moody's sensitivity analysis at rating assignment assumed a 50% revenue reduction to assess the project's resiliency to a sharp decline in traffic and increased competition from adjacent roads. Under this sensitivity case, Senior Lien DSCR would be around 2.5x on average, Senior Lien and TIFIA loan DSCR slightly above 1.25x and the Moody's all-in fixed charge coverage ratios would remain below 1.0x. Under this scenario, NCTA would need to rely on its liquidity reserves and potentially support from NCDOT to cover the project's operating expenses.

Initial traffic volumes and operating revenue are more consistent with management's forecast, which is credit positive. A sustained positive trend would support a positive trajectory of the Monroe Expressway's credit profile.

The TIFIA Loan will be fully refunded with the proceeds from the 2022A Bonds, therefore all debt will be on the senior lien. As a result, management expects that the average Senior Lien DSCR will be close to 3.0x, lower than the 4.8x originally forecasted, but above the 2.5x average Senior Lien plus TIFIA loan DSCR.

### Strong support from the State of North Carolina and its agency the NCDOT

The Monroe Expressway benefits from the strong support by the state through legislative actions, \$24 million in annual state appropriation revenue support and a contingent guarantee by the NCDOT to pay for any shortfalls in the operations and maintenance and renewal and replacement reserves. NCDOT's responsibility allows for debt service on the senior lien and the TIFIA note payable to be paid ahead of operating and maintenance (O&M) expenses and reserve deposits as well as renewal and replacement (R&R) reserve deposits.

NCTA has received in the past funds from NCDOT and from the State Highway Trust Fund to fund as part of the project financing plan. NCTA to date has not relied on the O&M, R&R or Project Completion guarantees. In addition, NCTA's strategy is closely aligned with that of NCDOT and of the state, evidenced by the fact that the North Carolina General Assembly and the governor select the vast majority of NCTA's board members. NCTA has strong rate-setting powers.

# Liquidity

The Monroe Expressway's current liquidity is strong and better than assumed at rating assignment.

In addition to standard debt service and operating reserves, liquidity is bolstered by the sizeable ramp-up reserve and NCDOT's contingent guarantee to pay O&M expense shortfalls. The exhibit below shows NCTA's major liquidity sources for the Monroe Expressway as of June 30, 2021. In fiscal 2021, half of the project fund balance, or \$17.2 million, was transferred into the ramp-up reserve, increasing the balance in that pledged fund to \$53 million from \$31.2 million in 2020. Unrestricted cash position will further strengthen following the Series 2022A issuance, since nearly \$6 million will be released from the debt service reserve account and is expected to be deposited to the unpledged reserve. The remaining amount to be released from both TIFIA and Series 2016 DSRFs will be applied towards to interest payments of the 2016A bonds, pay the cost of a senior DSRF surety, and to pay off the TIFIA loan, the later two will reduce the size of the 2022A Bonds.

Exhibit 3
Fund Balances as of June 30, 2021

Fund	Balance as of June 30, 2021 (000)
State Appropriation Revenue	\$0
State Appropriation Reserve	\$4,305
Revenue	\$0
Senior Lien Debt Service Reserve Fund	\$12,112
Operations & Maintenance Expense Fund	\$2,454
Operating Reserve Fund	\$3,763
Renewal & Replacement Fund	\$7,574
TIFIA Debt Service Reserve Fund	\$11,817
Ramp-up Reserve Fund	\$53,325
Project Fund	\$0
Unpledged Reserve	\$26,205

Source: North Carolina Turnpike Authority

The ramp-up reserve will be available to pay senior lien debt service during the first five years of the project – i.e., through 2024. Thereafter, the ramp-up reserve is available to fund deficiencies in any of the reserve accounts, and can also be transferred to either the pledged account or the unpledged account of the general reserve fund if the restricted payment test is met.

## **Debt and Other Liabilities**

#### Legal security

The senior lien toll revenue bonds benefit effectively from a gross pledge as the NCDOT has provided a contingent guarantee to cover increased O&M and Renewal and Replacement (R&R) reserve requirements. The O&M requirement represents one-fourth of the total budgeted operating expenses for the next fiscal year and the R&R reserve requirement is equal to approximately 100% of the total budgeted R&R expenses for the current fiscal year plus 10% of the budgeted R&R expenses for the next 9 fiscal years.

If at any time the amounts in either the Operating Reserve Fund or the R&R Fund are not equal to the reserve requirement, then subject to the availability of funds, NCDOT will pay the amount necessary so that amounts in these reserve funds equal the

requirement. The obligation to replenish Operating Reserve Fund is to be funded from amounts in the State Highway Fund and the obligations to replenish the Renewal and Replacement Fund or pay for unexpected construction costs are to be funded from the State Highway Fund or the State Highway Trust Fund. Each such payment is subject to appropriation by the state and the availability of amounts in the respective funds.

The system also has a General Reserve Fund, which includes the Ramp-up Reserve, Pledged and Unpledged Accounts. Funds in the Unpledged Account may be used for any legally available purpose, while funds in the other accounts can be used for more limited purposes under certain restrictions, including funding any shortfall in the debt service payment, debt service reserve fund and costs of improvements to the project or any additional project related to the system. The flow of funds between the Pledged and Unpledged accounts is an open loop, subject to meeting certain conditions such as all reserve funds being fully funded at their respective requirements and complying with the rate covenant.

The rate covenant requires a senior and total Debt Service Coverage Ratio of 1.3x and 1.1x, respectively, and 1.0x all fixed obligations DSCR, including all debt service and Renewal and Replacement Fund deposits. The system has a surety-funded debt service reserve requirement which are funded at the lesser of 10% of principal, maximum annual debt service or 125% of average annual debt service.

#### Debt structure

As of June 30, 2021, the debt structure of the Monroe Expressway consisted of the following outstanding debt:

- » \$233.9 million State Appropriation Revenue Bonds Series 2010 due January 1, 2041, rated Aa1
- » \$9.8 million State Appropriation Revenue Bonds, Series 2011 due July 1, 2021, rated Aa1
- » \$73.9 million State Appropriation Revenue Refunding Bonds Series 2021 due July 1, 2041, rated Aa1
- » \$119.5 million toll revenue bonds Series 2016A, due July 1, 2054, rated Baa3
- » \$21.6 million toll revenue (capital appreciation) bonds Series 2016C due July 1, 2041, rated Baa3
- » \$166.5 million TIFIA loan, rated Baa3, due July 1, 2053

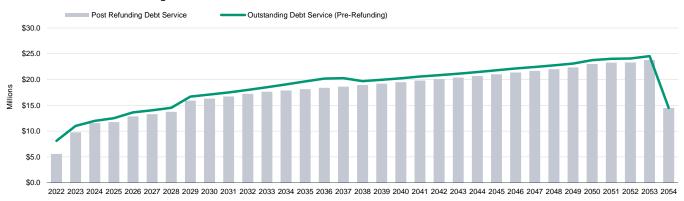
Following the issuance of \$156.2 million toll revenue bonds, Series 2022A due in July 1, 2053, the TIFIA Loan will be fully refunded. Estimated cash flow savings of this refunding is approximately \$890,000 average annual debt service reduction, with an overall savings of \$29.5 million.

The debt service profile of the 2016 and 2022 senior lien toll revenue bonds continued to be a backloaded amortization profile. This structure aligns with the revenue generating potential of the road as it ramps up in the initial years, but can entail reliance on sustained long-term growth – which is vulnerable to setbacks from events like COVID – to meet higher debt service requirements in the outer years. We view this risk as partially balanced by the above-average population growth in the project area, which supports an expectation of strong revenue growth over time.

Exhibit 4

Debt Service Profile

Current vs. Pro forma after refunding



Source: North Carolina Turnpike Authority

#### Debt-related derivatives

The Monroe Expressway does not have any debt-related derivatives.

#### Pensions and OPEB

Pension liabilities are low. Employees of the authority are participants in the state's Teachers' and State Employees' Retirement System. Based on a discount rate of 7.00%, NCTA reported a net pension liability of \$1.27 million for fiscal 2021. Moody's adjusted net pension liability was \$4 million for fiscal 2021 and is based on a lower discount rate.

#### **ESG** considerations

#### **Environmental**

The environmental risk for Monroe Expressway is low as it is primarily indirect, as is the case for most toll road issuers. Traffic volumes are fundamentally linked to macroeconomic trends, business sentiment, population growth and personal mobility requirements. The increasing use of electric or hybrid vehicles still require the use of the roadways, but require new investment for charging stations.

## **Social**

The most material social risk has been the coronavirus outbreak and the related movement restrictions and economic impact that materially reduced traffic and revenue. Revenue growth will remain subdued over the next 12 months as activity recovers to pre-COVID levels. High toll rates can lead to user pushback or switching to non-tolled alternatives.

#### Governance

The asset is managed by the North Carolina Turnpike Authority (NCTA). The authority is empowered to design, establish, purchase, construct, operate and maintain turnpike projects identified by the North Carolina General Assembly, including the Monroe Expressway and the Triangle Expressway. The NCTA was created in 2002 by the North Carolina Legislature to look for alternative financing for key transportation projects, and became part of the NCDOT, a public agency of the State of North Carolina, in 2009.

The authority is governed by a nine-member board, consisting of four members appointed by the General Assembly of North Carolina, four members appointed by the Governor of the State and the Secretary of Transportation for the state is also a member. The authority board selects the executive director of the authority, who is responsible for the daily administration of the toll projects undertaken by the authority.

# Rating methodology and scorecard factors

The principal methodology used in this rating was Publicly Managed Toll Roads and Parking Facilities published in March 2019. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

The scorecard indicated outcome is a Baa3, in line with the assigned Baa3 rating. The assigned Baa3 rating also reflects the strong support from NCDOT and the State of North Carolina and our expectation that the Monroe Expressway will continue to extend its operating track record.

Exhibit 5
Mapping Monroe Expressway to the Publicly Managed Toll Roads and Parking Facilities methodology

Factor	Subfactor	Score	Metric
1. Market Position	a) Asset Type	Ва	
	b) Competitive Position and Environment	Ва	
	c) Economic Strength and Diversity of Service Area	Ваа	
2. Performance Trends	a) Annual Revenue	Ва	\$25 m
	b) Operating Track Record and Revenue Stability	Baa	
	c) Ability and Willingness to Increase Toll Rates	A	
3. Financial Metrics	a) Debt Service Coverage Ratio <sup>1</sup>	A	1.6x
	b) (Debt + ANPL) to Operating Revenue	В	
Notching Considerations		Notch	
	1 - Debt Service Reserve Fund level	0.0	
	2 - Open/Closed Flow of Funds	-0.5	
	3 - Days Cash on Hand	1.0	
	4 - Asset Ownership and Financing Structure	-0.5	
	5 - Leverage Outlook	0.0	
Scorecard Indicated Outcome:		Baa3	

<sup>[1]</sup> Moody's Debt Service Coverage Ratio is calculated on a Net Revenue basis (annual revenues minus operating expenses excluding depreciation and amortization).

<sup>[2]</sup> The notching for open/closed flow of funds reflects the possibility to use funds in the unpledged account of the general reserve fund for other purposes than the Monroe Expressway. The notching for Asset Ownership and Financing Structure reflects the backloaded debt amortization profile.

<sup>[3]</sup> Financial metrics are based on our Base Case after the initial ramp-up period.

Source: Moody's Investors Service

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